In the claims

1-70 (cancelled)

71. (currently amended) A method of inhibiting growth of leukemia cells comprising administering a therapeutically effective amount of a ~~leukemia~~ therapeutic agent conjugated to a monoclonal antibody or fragment thereof, wherein the monoclonal antibody or fragment thereof binds to human c-kit ~~OCIM1 cells~~ and blocks the binding of human stem cell factor to human c-kit ~~OCIM1 cells~~.

72. (currently amended) A method of inhibiting growth of solid tumors comprising administering a therapeutically effective amount of a ~~solid tumor~~ therapeutic agent conjugated to a monoclonal antibody or fragment thereof, wherein the monoclonal antibody or fragment thereof binds to human c-kit ~~OCIM1 cells~~ and blocks the binding of human stem cell factor to human c-kit ~~OCIM1 cells~~.

73. (previously presented) The method of Claims 71 or 72 wherein the monoclonal antibody is produced by immunization with a cell line that displays human stem cell factor receptor on its surface.

74. (cancelled)

75. (previously presented) The method of Claim 71 or 72 wherein the monoclonal antibody is produced from the hybridoma cell line ATCC No. HB10716.

76. (currently amended) The method of Claims 71 or 72 wherein the monoclonal antibody or fragment thereof blocks binding of human stem cell factor to human c-kit ~~OCIM1 cells~~ by at least 50%.

77. (currently amended) The method of Claims 71 or 72 wherein the monoclonal antibody or fragment thereof blocks binding of human stem cell factor to human c-kit ~~OCIM1 cells~~ by at least 75%.

78. (currently amended) The method of Claims 71 or 72 wherein the monoclonal antibody or fragment thereof blocks binding of human stem cell factor to human c-kit ~~OCIM1 cells~~ by at least 90%.

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79. **(previously presented)** The method of Claims 71 or 72 wherein the monoclonal antibody or fragment thereof decreases the growth rate of early erythroid colony forming cells (BFU-E) by at least one half.

80. **(previously presented)** The method of Claims 71 or 72 wherein the monoclonal antibody or fragment thereof decreases the growth rate of erythroid colony forming cells (BFU-E) by at least one tenth.

81. **(previously presented)** The method of Claims 71 or 72 wherein the monoclonal antibody or fragment thereof decreases the growth rate of erythroid colony forming cells (BFU-E) by at least one hundredth.

82. **(currently amended)** The method of Claims 71 or 72 wherein the monoclonal antibody or fragment thereof comprises a murine variable region<u>s</u> and a human constant <u>and framework</u> region<u>s</u>.

83. **(currently amended)** The method of Claims 71 or 72 wherein the monoclonal antibody or fragment thereof comprises a murine hypervariable region and a human constant and framework region.

84. **(currently amended)** The method of Claims 71 or 72 wherein the monoclonal antibody or fragment thereof <u>is</u> ~~comprises~~ a human monoclonal antibody <u>or fragment thereof</u>.

85. **(previously presented)** The method of Claims 71 or 72 wherein the monoclonal antibody or fragment thereof comprises a pharmaceutical composition containing the antibody.

86. **(previously presented)** The method of Claims 71 or 72 wherein the composition comprises one or more of a buffer, diluent and additive.

87. **(currently amended)** The method of Claims 71 or 72 wherein the ~~leukemia-therapeutic agent or solid-tumor~~-therapeutic agent is selected from one or more of a radioisotope, a toxin, an antitumor drug, an antibiotic, and a cytostatic drug.

88. **(previously presented)** The method of Claim 87 wherein the radioisotope is selected from one or more of ^{32}P, ^{131}I, ^{90}Y, ^{186}Re, ^{212}Pb and ^{212}Bi.

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89. **(previously presented)** The method of Claim 87 wherein the toxin is a protein of glycoprotein toxin.

90. **(previously presented)** The method of Claim 87 wherein the toxin is selected from one or more of diphtheria toxin, shigella toxin, pseudomonas exotoxin, ricin, abrin, modeccin, viscumin, pokeweed antiviral protein, saporin, momordin and gelonin.

91. **(previously presented)** The method of Claim 87 wherein the antitumor drug is selected from one or more daunomycin, adriamycin, aclacinomycin, eseperamycin, calicheamycin, and neocarzinostatin.

92. **(previously presented)** The method of Claim 87 wherein the cytostatic drug is selected from one or more of cis-platinum, vinblastine and methotrexate.

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